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PTO/SB/08a (05-03)
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U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Substitute for form 1449A/PTO

Filing Date March 2, 2002

First Named Inventor Kimmo Laiho et al.

Art Unit 2684

Examiner Name TBD

(use as many sheets as necessary)

Sheet 1 of 1 Attorney Docket Number 004770.00033

	U.S. PATENT DOCUMENTS						
Examiner Cite No.1	Olle	Document Number	Publication Date	Name of Patentee or Applicant of	Pages, Columns, Lines, Where Relevant		
		Number - Kind Code <sup>2</sup> (if known)	MM-DD-YYYY	Cited Document	Passages or Relevant Figures Appear		
TITI	-	US-5,936,965	8/10/99	Doshi et al.			
		US- 5,764,700	6/09/98	Makinen	RECEIVE		
- Ki		US- 5,359,607	10/25/94	Nguyen et al.			
TQS		US- 4,601,586	7/22/86	Bahr et al.	JUN 0 8 2004		
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		US-			Technology Center 20		

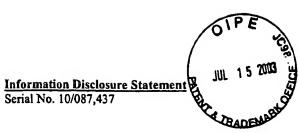
**Application Number** 

		Foreign Patent Document	TENT DOCUM		Pages,	
Examiner Initials*	Cite No.1	Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>3</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Columns, Lines, Where Relevant Passages or Relevant Figures Appear	™
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		OTHER PRIOR ART NON P	ATENT LITER	ATURE DOCUMENTS		
Examiner Initials *	Examiner Cite Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue					
		Written Opinion from PCT/IB03/00694 dated	May 3, 2004			

Examiner Signature	alan	, Dan	H	Date Considered	12/5/04

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. I Applicant's unique citation designation number (optional), 2 See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04, 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. 6 Applicant is to place a check mark here if English language Translation is attached.

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	PTO-1449 (Modified)		ATTY. DOCKET NO. 004770.00033	SERIAL N . 10/087,43		
	EPARTMENT OF COM T AND TRADEMARK		APPLICANT Kimmo Laiho			
INFORMATION DISCLOSURE STATEMENT BY APPLICANT			FILING DATE March 2, 2002	GROUP A 2684	. <del></del> .	
			U.S. PATENT DOCUMENTS			
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE
09	2003/0067943 A1	4/10/03	· Arsenault et al.			
	6,490,727	12/3/02	Nazarathy et al.			
	6,356,555	3/12/02	Rakib et al.			
*	6,335,766	1/1/02	Twitchell et al.			
w	6,285,686	9/4/01	Sharma			
			FOREIGN PATENT DOCUMENTS			
EXAMINER INITIAL	DOCUMENT NUMBER ·	DATE	COUNTRY	CLASS .	CLASS CLASS TRUM	
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IDS w/1449 form filed: July 15, 2003

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## ÍNFORMATION DISCLOSURE STATEMENT BY APPLICANT

Complete If Known

Application Number 10/087,437

Filing Date March 2, 2002

First Named Inventor Kimmo Laiho et al.

Group Art Unit 2684

Examiner Name TBD

(use as many sheets as necessary)

Sheet 1 of 2

Attorney Docket Number 004770.00033

_			U.S. PATENT	DOCUMENTS	
Examiner Initials *	Cite No.1	Document Number  Number - Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
RO		US-5,371,734	12-06-1994	Fischer	
N		US-5,710,756	01-20-1998	Pastemak	
		US- 5,886,995	03-23-1999	Arsenautt	
		US-6,175,557	01-16-2001	Diachina eg al.	REOF
		US-6,226,278	05-01-2001	Bursztenj	1-CF//E
		US- 6,262,982	07-17-2001	Donahue	440
		US- 6,262,990	07-17-2001	Ejiri	MAY 0 1 1000
)		US- 6,282,209	08-28-2001	Kataoka	Took . 2003
1		US- 6,295,450	09-25-2001	Lyer	Technology Center 2
V		US- 6,339,713	01-15-2002	Hansson et al.	Center 2
195		US- 6,477,382	11-05-2002	Mansfield et al.	
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		US-			·

	-	FOREIGN PA	TENT DOCU	MENTS		
Examiner	Cite	Foreign Patent Document		Name of Patentee or	Pages, Columns, Lines,	
initiais*	No.1	Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)	Publication Date MM-DD-YYYY	Applicant of Cited Document	Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
_OUT		WO 02/01879	01-03-2002	Aaltonen et al.		
		WO 02/03728	01-10-2002	Salo et al.		
17		WO 02/03729	01-10-2002	Salo et al.		
V.		WO 01/31963	05-03-2001	Hasan et al.		
az		WO 01/72076	09-27-2001	Xu et al.		
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<sup>&</sup>lt;sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at <a href="https://www.usgto.gov">www.usgto.gov</a> or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.





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Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB \$2 tips number Substitute for form 1449A/PTO Complete if Known **Application Number** 10/087,437 INFORMATION DISCLOSURE Filing Date March 2, 2002 STATEMENT BY APPLICANT First Named Inventor Kimmo Laiho et al. Group Art Unit 2684 (use as many sheets as necessary) **Examiner Name** TBD 004770.00033 Sheet of Attorney Docket Number

	OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS					
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the Item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>			
		Search Report				
ar		NEN-FU HUANG ET AL, "Architectures and Handoff Schemes for CATV-Based Personal Communications Network," Infocom '98. Seventeenth Annual Joint Conference of the IEEE Computer and Communications Societies. Proceedings. IEEE San Francisco, CA, USA, March 29 to April 2, 1998; IEEE New York, NY, USA, March 29, 1998, pages 748-755				

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## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet of 2

	Complete if Known	
Application Number	10/087,437	4 1/
Filing Date	March 2, 2002	73 6
First Named Inventor	Kimmo Laiho et al.	200
Art Unit	2684	S. C.
Examiner Name	TBD	R.
Attorney Docket Number	004770.00033	600

Examiner	Cite	Document Number	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant
Initials *	No.	Number - Kind Code <sup>2</sup> (if known)	MM-DD-YYYY	Citad Document	Passages or Relevant Figures Appear
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		FOREIGN PA	TENT DOCUM	ENTS		
Examiner Initials*	Cite No.	Foreign Patent Document  Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	7⁴
N		DE 101 64 665 A1	08-01-2002	VTech Communications Ltd.	·	
		EP 0 577 322 A1	01-05-1994	Nokia Mobile Phones Ltd.		
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of 2

Complete if Known **Application Number** 10/087,437 Filing Date March 2, 2002 First Named Inventor Kimmo Laiho et al. **Group Art Unit** 2684 TBD **Examiner Name** Attorney Docket Number 004770.00033.

	OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS					
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W		Draft Report of the 52 <sup>rd</sup> Meeting of DVB GBS, EBU Headquarters, Geneva, June 25 <sup>th</sup> /27 <sup>th</sup> 2002. pages 1-12.				
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